

New Hampshire's Independent Energy Study Synthesis
Chapter 5 –C&I Energy Efficiency CORE Programs Review and Assessment
November 30, 2012

Summary of Chapter Intent

Chapter 5 of the New Hampshire Independent Energy Study provides an overview and an assessment of the energy efficiency programs available to New Hampshire's commercial and industrial (C&I) customers and administered by the state's electric and gas utilities. The chapter includes a total of 40 recommendations and sub-recommendations. The material is organized by the different market segments the programs are designed to serve:

- C&I existing facilities – Small Businesses
- C&I existing facilities – Large Businesses
- C&I new equipment and construction
- Specialty retrofit programs

The chapter describes the characteristics of the programs that are meeting policies and goals and makes recommendations for improvements. The overview includes a discussion of funding sources, program funding levels, energy savings, and benchmarking of New Hampshire results to those of other programs across the country.

Findings

The Energy Efficiency & Sustainable Energy (EESE) Board agrees in principle to many of the recommendations, but believes they can be most appropriately addressed without legislative action, with the exception of increasing funding for energy efficiency programs, which may require legislation, depending on the approach. The remaining recommendations and comments are addressed to program administrators and the PUC in its administrative and program oversight role.

Top Priorities for Early Action

Better Alignment and Coordination among Utility Efficiency Programs

Several of the Independent Energy Study recommendations address coordination between the utilities and alignment of efficiency programs. Recommendations include: coordination of how savings are calculated and claimed; coordination of account management between utilities; and completion of the alignment between gas and electric energy efficiency programs.

There has been movement in this direction already within New Hampshire. Differences between the programs offered by the gas utilities will be eliminated in 2013, and all utility Account Executives will be trained on the full suite of electric and gas programs. Each utility's Account Executives provide a range of services in addition to energy efficiency and are the single point of contact between the utility and the customer within that utility's boundaries

or franchise. Rather than assigning a single Account Executive to customers with facilities in multiple franchise areas, as was suggested in the Independent Energy Study, the assigned Account Executives from the affected utilities will coordinate with each other when working with cross-franchise customers in order to serve their needs and eliminate duplication.

1) Development:

NH Utilities & CORE Stakeholders

2) Establishment:

Public Utilities Commission

3) Implementation:

NH Utilities

Maintain the Number of Efficiency-Project Site Inspections

The recommendation in the report suggested a reduction in the number of pre- and post-installation inspections. It is felt that this could be implemented in the near term to reduce program costs. Once a utility is comfortable with a vendor, then the utility can begin doing spot checks. However, any reduction in inspections will be tempered by the knowledge that these also serve as an opportunity to educate the customer and “up-sell” or introduce the customer to the next set of opportunities for energy efficiency investments.

1) Implementation:

NH Utilities

Top Priorities for Medium or Long-Term Action

Increase Resources Necessary to Achieve Energy Efficiency Targets

In Chapter 5, there are three separate recommendations to increase funding. These recommendations focus on:

- (1) New Construction;
- (2) Smart Start¹; and
- (3) CORE Programs overall.

Similar recommendations to increase funding appear in Chapter 3. As noted in Chapter 3, once an Energy Efficiency Resource Standard (EERS) is established, increased funding should be considered to ensure the required resources are available to meet EE targets. Even without an EERS, approaches for increased funding should still be explored to move New

1 PSNH and the NHEC offer a specialty program for local, federal, and state government customers referred to as the Municipal Smart Start Program. Municipalities may elect to finance all eligible retrofits so that no capital is required. The utility provides rebates and capital for the equipment and installation. The capital is repaid by the customer through a monthly charge on their bill. The monthly charge is calculated to be less than the calculated monthly energy savings, so the project stays cash flow positive.

Hampshire toward becoming more energy efficient, with energy markets that are more cost-effective and sustainable into the future.

While the EESE Board recognizes that an increase in the Systems Benefit Charge (SBC) is one way to increase funding, there are other approaches, some of which seek to enable public monies to be used to leverage private and third-party investments. *Property Assessed Clean Energy* (PACE) funding, for example, provides one important approach to leveraging large-scale resources for efficiency investments (see Chapter 10). Indeed, doing so is at the heart of the market transformation goals that are central to the Independent Energy Study and recommendations.

1) Development:

NH Utilities and CORE Stakeholders

2) Establishment:

Public Utilities Commission

3) Implementation:

Public Utilities Commission & NH Utilities

Recommendations that are in Progress

Set Higher CORE Program Performance Goals

The Independent Energy Study recommended setting more aggressive program goals. A new energy-savings goal-setting process has been established by the NH Public Utilities Commission and is underway. The process was intended to more closely align goals with past results, and it was used for the first time in development of the 2012 CORE Program savings goals. The process uses historical kilowatt-hour savings trends as a baseline. This baseline is then adjusted for relevant factors including: available funding, changes in measure costs, measure life, measure mix, and energy codes. The baseline and all adjustments are documented, reviewed by the Commission Staff and any interested parties, and then presented to the Commission for final review and approval.

As the EERS appears closer to implementation, this process should be reviewed and revised as needed.

1) Development:

NH Utilities and CORE Stakeholders

2) Establishment:

Public Utilities Commission

3) Implementation:

Public Utilities Commission & NH Utilities

Recommendations that are Completed

Increase Maximum Length of an Energy Performance Contract

Under current law, state agencies and municipalities can now enter into an energy performance contract (EPC) with a term lasting up to 20 years. In the 2012 legislative session, Senate Bill 252² (SB252) increased the maximum term that the state and local governments can enter into EPCs from 10 to 20 years. CORE program account executives should prepare to assist local governments in understanding and taking advantage of this legislative change to take on more and larger energy projects.

Areas for Further Consideration

Explore the Potential for Municipal Lease-Purchase Agreements

One avenue for exploration, not mentioned in the report, may be to investigate the use of Municipal Leasing as an alternative or supplement to the recommendation to increase Smart Start funding, which has been a significant financing tool for municipal and governmental customers. The NH Local Energy Working Group has initiated an investigation of the issues surrounding municipal lease purchase and should be encouraged to continue their efforts and report their findings to the EESE Board.

1) Implementation:

NH Local Energy Working Group

Background

In New Hampshire commercial and industrial (C&I) customers use approximately 57% of all electricity, 68% of the natural gas, and 22% of the fuel oil. There are an estimated 36,000 C&I electric customers, and the largest 1,400 of these account for around two-thirds of the electric usage in the C&I sector. These so-called Large C&I customers have electric demand greater than 200 kW; the remaining customers whose demand is 200 kW or less are referred to as Small C&I. On the gas side there are 15,700 C&I customers, and they consume two-thirds of the natural gas used in the state.

There are three CORE Energy Efficiency Programs designed to help C&I customers reduce electric usage: (1) the New Equipment & Construction Program provides technical assistance and incentives for customers purchasing new equipment or building new facilities; (2) the Large C&I Retrofit Program serves the needs of large customers improve existing equipment and facilities, and (3) the Small Business Energy Solutions Program provides turnkey audits and installation of electric efficiency measures to small businesses. Overall the C&I programs

² [NH Senate Bill 252](#) (2012 Session), signed into law on June 7, 2012.

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serve around 1,000 customers annually and offer both prescriptive and custom incentives for commonly used efficiency measures and for specialty items respectively.

Overall funding for the state's electric efficiency programs was \$21.0 million in 2011. Of this total \$9.7 million is used in support of commercial and industrial customers and the remaining \$8.9 million is targeted to programs for residential and low-income customers. The primary funding source is the System Benefits Charge which raises \$19.0 million through a \$0.0018 charge on each retail kilowatt-hour sold in the state. While the legislature has lowered SBC charge on two occasions to provide additional assistance to low-income electric customers, the current level is the same as it was in 2003. An additional \$2 million comes from the Forward Capacity Market operated by ISO_NE, the entity responsible for operating the power grid in New England. Gas customers pay an energy efficiency charge included in the Local Delivery Adjustment Charge (LDAC) which generated \$5.6 million in 2010.

The electric programs are saving approximately 550 million kWhs annually at a cost of 1.6 cents per lifetime kWh as compared to an average of 2.8 cents in a recent national benchmarking study of similar programs. Account Executives are assigned to larger customers to raise awareness and simplify efficiency program participation among this group of high energy users. Sixty percent of small and 86% of large business customers are aware of the programs³. Participants found the programs easy to access, the Account Executives responsive, and given the chance, 94-98% would participate again.

The gas programs currently offer efficiency services targeted to both small and large businesses purchasing new equipment or undertaking new construction or retrofit projects. Between 2006 and 2010, on average the programs have served 450 customers annually, and on average the programs saved 16.2 million therms annually during this same period. This is enough energy to meet the annual heating needs of more than 31,000 homes. Each therm saved is costing 19 cents as compared to a national benchmarking study which found that the cost to save a therm ranged between 27 and 55 cents and averaged 37 cents. Efforts are underway to better align the gas programs with the CORE electric programs, and these initiatives need to continue to move towards seamless integration from a customer's perspective.

³ Based on 2008 data published in *Additional Opportunities for Energy Efficiency in New Hampshire*, GDS Associates, January 2009, p. 57, <https://www.puc.nh.gov/Electric/GDS%20Report/GDS%20Final%20Report.htm>.